

PLANNING FOR A GREATER NEW YORK OF 25,000,000

Engineer Outlines Great Scheme for Making New Land of the East River and Parts of the Harbor— Pictures a Wonder City of the Future

"HAVE you any idea how rapidly the population of New York is increasing its territory?" said Dr. T. Kennard Thomson, the engineer. "The time has come to plan for the days ahead and to agree upon some sort of orderly scheme which shall guide us in providing new territory upon which to place our increasing citizenry and to furnish suitable settings and conveniences for the varied expressions of the city's industrial life. The growing need for this widened foothold can be gathered from a brief review of New York's past."

"The population of the city in 1800 was only 80,000. Fifty years later the number of inhabitants had increased nearly ninefold, the population at that time totalling 700,000. In that half century the metropolis acquired a growing rate which has remained fairly constant ever since, for now, in 1915, the citizenry of Greater New York is approximately 6,000,000. At this rate, not counting the calls made upon us by suburbanites and the people of nearby cities, twenty-five years hence we shall have to take care of nearly 25,000,000 persons within our gates."

"Are you familiar with the manner in which the topography of the financial district of Manhattan has changed?" Broad street, now flanked by ponderous office buildings, was a canal in the earlier days of the municipality, and upon the banks of that waterway stood the finest homes of the time. Pearl street to-day got its name from the fact that upon the beach over which it ran New York's earlier inhabitants used to gather rainbow tinted shells. Again, the eastern end of Wall street formerly, as now, terminated at the water's edge, but originally that highway was half as long, showing how ground has been made in the interval and the encroachment upon the East River broadened."

"Of later years, in our effort to gain more standing room and to furnish suitable dockage for ships on the North River side, we have built outward into the stream until the Government, at the instance of the army engineers, has wisely called a halt, and yet our pier facilities are woefully insufficient under normal conditions and the demands for them are growing."

"The Panama Canal in the near future will bring to us an immense measure of overseas tonnage. The Cape Cod Canal is now directing large by way of Long Island Sound a steadily growing waterborne traffic, and the intracoastal canal will make of the port of New York the prime point of freight handling. In the State we are pushing to completion that splendid project, the great barge canal, and by that waterway we are going to drain in a freight sense substantially the region contiguous to the great lakes, and New York will become the forwarding and reshipping point for the return trade. It must be apparent that we are woefully unequal to the calls that will be made upon us when all of these trade routes are operating simultaneously."

"As matters stand to-day it probably is not an exaggeration to say that lighterage charges and the lack of pier facilities for handling cargoes and freight impose costs in dollars where improved methods and up to date apparatus would reduce the outlay to a like number of cents. Not only do we want to better materially existing equipment, we should make it possible to provide a harbor to hold every shipping interest and every commercial enterprise that seeks to establish itself here."

"Now I propose to add fifty square miles of land to Greater New York's area and port foothold. At the same time it will mean the addition of one hundred miles of new waterfront for piers, &c. I would place New York City Hall in the centre of a really Greater New York having a radius of twenty-five miles, and within that circle there would be ample room for a population of fully twenty millions, the entire project to be an accomplished fact in a span of only a few years."

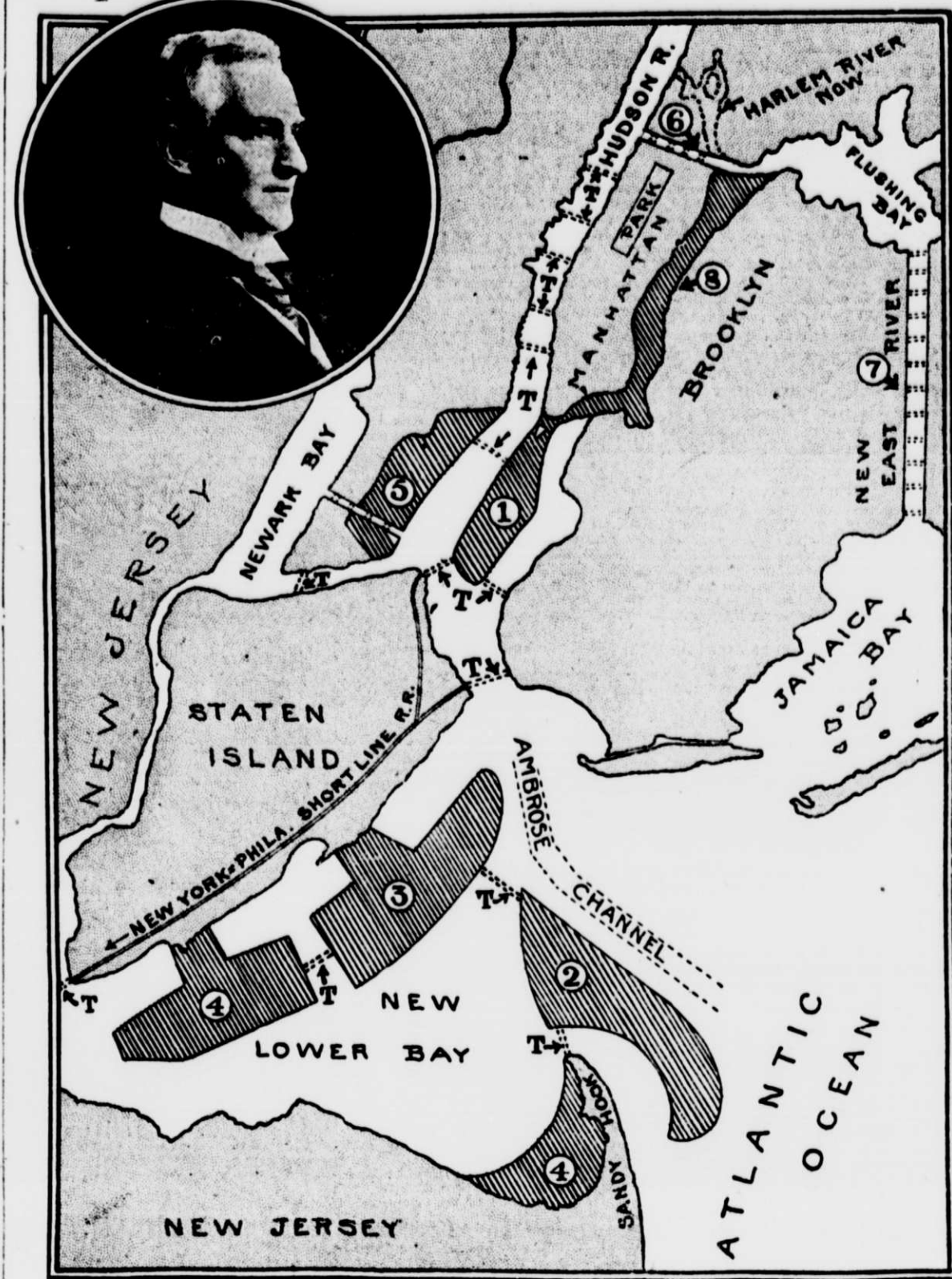
"Yes, this would mean an ultimate expenditure of a great deal more than the sum involved in constructing the Panama Canal, but the return would be many times greater than the original expenditures, swelling the city's money bags while bringing a boon to the investing public and untold benefits to the great municipality at large."

"The very first work I should recommend would be the binding together of Governors Island and the Battery waterfront and then reaching southward by reclamation until Manhattan approached within a mile and a quarter of Staten Island. This would give us an eight mile waterfront, on the east and west sides of this new made land, from which thousands of dock could be extended without interfering with the tidal sweep of the Hudson River. I believe this initial stage of the project could be made ready for the building of docks and other structures inside of three years."

"With this done the interval between the Manhattan extension and Staten Island could be spanned by tunnels. To-day the assessed value of Staten Island is about \$50,000,000, but with the completion of the neck south of Governors Island the property value of Staten Island would not fall short of \$500,000,000. But there is something more than a financial gain and the winning of elbow room for our industrial life."

"Investigations of the tidal flow of the Hudson River, as well as that of the East River, have disclosed a disconcertingly insanitary state of affairs, as at present the disposal of the city's sewage, by means of buoys cast adrift it has been clearly proved that it takes quite two days and a half for such a freely moving object to travel from Harlem to Sandy Hook. Now the lower currents in these bodies of water move seaward even more slowly, and it is toward the bottom that the fouler drainage settles."

"Sooner or later we must put in some sewer system that will carry the refuse discharge from the city's drain pipes safely seaward. The expense of an independent installation of suitable capacity would run into many millions of dollars. By building upon the Battery and running the new land close to Staten Island we should



Map showing New York and its environs with shaded portions indicating proposed made land.
In circle—Dr. T. Kennard Thomson.

narrow the basin of the upper bay, into which the Hudson now empties. So, too, should we affect the East River. By thus constricting these water routes we should increase somewhat the velocity of their currents, and this would cause them automatically to scour their waterbeds and to purge themselves more rapidly, sending their outflow seaward more forcibly and further, and thus relieving the city by providing

ing first relieved the city by providing sorely needed additional waterfront and suitable freight handling facilities at the piers, would be the construction of a large island flanking the northern tip of Sandy Hook. The

THE WHITE RATS DECIDE TO SCAMPER PUBLICLY

Unique Organization of Vaudeville Performers Plans Big Benefit Performance on August 10

THE White Rats of America, the national organization of vaudeville performers, will give a public all star scamper at the Manhattan Opera House on Tuesday, August 10. The proceeds are to be devoted to the charity fund of their own organization and to that of the Actors' Fund of America.

A proposed touring scamper, which was to include all the important cities between New York and San Francisco, was arranged for early last June and called off because several of the headliners were not able to cancel their engagements at that time. Since then matters have so adjusted themselves that not only will all the original artists, but also those who have promised their services then be able to participate in this coming entertainment but other names have been added, which could not have been secured for the first intended scamper.

One of the features will be the appearance of the most popular and highest priced male and female stars now acting in the movies. If negotiations now under way go through, the history of the White Rats is an interesting one. The meeting of eight popular young players, David Craig Montgomery, Fred Stone, Sam Morton, Thomas Lewis, Sam J. Ryan, Mark Murphy, James F. Dolan and George Fuller Golden, one hot June Sunday late in the month of June in 1909 in the lobby of the old Parker House, on Twenty-ninth street, this city, since raised to make room for a more modern building, was the organization's beginning.

The idea being suggested, the organization was completed that same night in Dave Montgomery's room up stairs. In this simple surrounding, thus was born an institution which has done much to advance the condition of the actor in America. A few weeks later, again in Dave Montgomery's quarters, the second meeting took place of this newly born organization. At this time, its membership having increased to sixteen, its first set of officers was elected. George Fuller Golden was chosen president, or big chief; David Craig Montgomery, vice-president, or little chief; James J. Morton, secretary, or

secret; Mark Murphy, treasurer, or treasurerat. A board of directors was also selected at this time and included Sam Morton, Tom Lewis, Fred Stone, James F. Dolan, Sam Ryan and Nat M. Wille.

The spirit of their cause which these few were able to infuse into their brother players was so effective that when another meeting was called, six weeks later, fifty answered the roll call. During all this time these

meetings continued to be held in Montgomery's rooms. The increase of membership, however, now demanded larger quarters and to that end meetings were held in a large room, over Koster & Bial's Music Hall, on Twenty-third street, near Sixth avenue. With each successive meeting the membership increased, so that in a little less than six months hundreds were clamoring to become members.

During the autumn of the same

year of organization (1909) the White Rats of America made their first real business move when they established an office on Thirty-fourth street in the Savoy Theatre Building, for the purpose of securing engagements for their members. The membership then was over 500. Its growth from that point was rapid until it now numbers among its members practically every vaudeville actor and actress in the country.



The founders of the White Rats.

Standing, left to right—James F. Dolan, Tom Lewis, Sam J. Ryan, Sam Morton and Fred Stone.
Seated—David C. Montgomery, George Fuller Golden and Mark Murphy.

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upper side of this new made land would run parallel with the Ambrose Channel at that point, in fact would face the southern side of that passage with a solid wall of rock and concrete. In building this area the bottom material adjacent to the channel and even deeper that route itself. Next I should urge the rearing upon Old Orchard Shoal of the first of two extensive reclaimed areas which when joined to Staten Island would form in the neighborhood of Great Kills a large enclosed basin, and in addition to this afford protected dock frontage on several sides.

"In forming a new lower bay forty square miles of land would be added for shipping and industrial purposes at points where the sea would be within easy reach and where railway terminals could be established connecting at once with the main lines bound north, west and south. The shallow just within and contiguous to Sandy Hook should be filled in. This would mean the deflection of the Shrewsbury River back to its old outlet at the foot of Atlantic Highlands."

"Having disposed of the problem of the lower bay—and there in my mind I see the establishment of vast steel plants, manufacturing and grain elevators—I should next urge the reclamation of the extensive shoal area reaching northward from Robbins Reef light past Ellis Island to the wharves of Jersey City. This, again, would further wall in the Hudson River, stimulate its self-dredging flow and provide quite four miles of additional waterfront from which 1,000 foot piers could be extended without hurt to the river's movement or hampering of shipping."

"Instead of obliging vessels to thread the tortuous Kill van Kull as at present I would dredge a new river north of that stream by which Newark Bay and the Hudson River could be placed more directly in touch. Simultaneously Newark Bay should be dredged and developed in order to improve the water routes to Newark. This new river should have a depth of forty feet. Now we come to what might be called a military or strategic phase of this whole scheme."

"As matters stand to-day our navy yard at Brooklyn has woefully shrunk in comparison with the present day demands made upon it. Modern dreadnoughts want a good deal of elbow room and they should not be hampered by narrow channels and existing currents when getting in and out of port among numerous commercial craft. As you know, it has been urged that the navy yard be moved to the Bayonne shore of the upper bay. Capt. Louis S. Van Duzer, U. S.

N., has very forcibly emphasized the need of relocating our prime naval base.

"At present, according to that authority, during the period of a single tide it is possible to clear from the navy yard where it now is but two battleships. By extensive improvements, including an outlay of possibly \$35,000,000 he has declared that four ships could be got away in the course of a day. Now in time of war this vital repair station would be worked to the limit, and New York's safety might hinge upon the celerity with which fighting craft could be taken to the yard and got away again."

"Instead of establishing the new navy yard virtually on the New York Bay shore of Bayonne I urge that the yard with its necessary dry docks be placed upon Newark Bay adjacent to the new river to be cut through that peninsula. This would make a station less accessible to a foe, easier to defend and yet almost as near the open sea. There would be space enough in which to maneuver freely and get ships out at any time during night or day, while without fighting craft needing repairs or supplies could return to port at any time unhampered by the tide."

"For purposes of general navigation the Harlem River is not available, and instead of that twisting, narrow, shallow waterway I propose a substitute in the form of a wide new river cut straight from the Hudson to the approach of Flushing Bay and with a depth of forty feet. Once more we are face to face with a strategic angle of our project."

"With this done our battleships could pass up the Hudson, through the new river and thence right down into Long Island Sound. To-day they cannot get through Hell Gate and therefore cannot reach the Sound except by steaming a hundred and more miles to the eastward around Montauk Point and then in through the Race."

"Yes, the cutting of this new river would be through solid rock, for Manhattan Island rises abruptly in that neighborhood, but don't let this appear an insuperable or a needlessly expensive undertaking. The fact is that a rock-hewn course would be cheaper in the end than a similar route dug through soft earth with flanking heights. Once cut the rocky walls would be rigid and lasting, without troublesome slides as at Panama."

"I haven't come yet to the end of my river building. As my plan shows, I propose to bind Flushing Bay and Jamaica Bay by means of a canal a thousand feet wide and forty feet deep, dredged right through Long Island. This would lend an entirely new project for the so-called Jamaica Bay project, for it would furnish a logical and suitable terminal for shipping bound north and south over the Sound route and make dockage facilities on Jamaica Bay a far more valuable asset to the city than piers placed there merely as terminal points for the ferry across Brooklyn."

"Once more we have the military view of the subject to consider. The new East River, which I would thus provide, would give our heaviest fighting ships another short cut to and from Long Island Sound. In brief, the strategic advantage which the Kaiser now enjoys by reason of the Kiel Canal we should have for our squadrons seeking to intercept or to outmaneuver an enemy trying to take New York in the rear by forcing its entrance into the Sound past the forts now guarding the western approaches of Long Island Sound."

"Before flooding the new East River the tubes for tunnels would be put in place for the purpose of continuing all highways that would be interrupted. These tunnels could be located in this fashion at a minimum of expense and when all of them were laid then the cofferdams holding out the waters of Flushing Bay and Jamaica Bay would be removed and a straight unbridged thoroughfare for shipping would be opened for traffic. Now we are ready for the elimination of the East River of nature's making."

"To-day we have spent many millions in bridging that water route and other millions in boring tunnels under its bed and yet these connect-

ing links are far from meeting the demands of rapid transit between Brooklyn and Manhattan. We are face to face with the need of more facilities, and increasing population will add to the need. Apart from the reciprocal movements of the inhabitants there is the daily handicap of transferring commodities of all sorts from one shore to another. If the city continues to grow at the same rate as heretofore then we must deal drastically with this problem of the East River."

"What would I do? I would reclaim the bed of that waterway by building a dam at Hell Gate and another down about Thirtieth street for a beginning, and then drain out the intermediate basin. Next, I would build another dam extending from South Ferry to the Brooklyn shore, and this section, after being suitably walled up along the sides, like the first, so as to leave a proper hydrostatic support for the flanking skyscrapers and lesser buildings, would be pumped out too."

"This done, I would not fill in this valley. In the ordinary understanding of the term, but from the stone foundation upward I would construct a series of floors, much after the fashion followed in the case of the Grand Central Station and its northward extension. These floors would provide a variety of facilities. In the lowest, or bedrock, level I would place gas and water mains, electric conduits and the city's great trunk sewers. The uppermost tier would be flush with the existing streets and thus bind Brooklyn and Manhattan by continuous highways, where they now terminate abruptly because of the intervening river."

"But I have not yet accounted for the levels between that of the streets and the one on the riverbed. I would turn some of these intervening levels into vast subterranean warehouses and one or more, as circumstances demanded, into great railway thoroughfares covered by a dozen or so tracks in each case. The outermost track on either side would be for loading freight from the stations paralleling the route, while the next succeeding track would serve for switching purposes. This would leave something like eight central tracks to form one grand speedway through the city for freight trains bound north and south."

"In this manner it would be possible for goods to be received for distribution throughout Greater New York under ideal conditions, and in turn for cars to be loaded in the very heart of the municipality with a minimum of intermediate handling."

"Possibly you do not realize how this draining and raising over of the East River would help us in disposing of our augmented populace. Just as twenty-five story buildings and others of lesser height now stand over the tracks at the Grand Central Station, so an office, industrial and tenement structures be reared upon the valley of the East River. Reaching as this additional area would from the Battery to Hell Gate, it is plain that we should have building room equal to a little short of half again as much as we now have upon the island of Manhattan."

"Don't be staggered by the magnitude of my entire project. I don't urge the simultaneous attack of the whole scheme. The plan should be carried through section by section in the order I have already named, and this would involve an annual expenditure of some ten to fifteen million dollars."

"With these facts made plain to the public seeking a safe investment Greater New York should have no trouble in floating bonds bearing an inviting interest, especially when upon the foundation of a project which has devolved. He has not been a dreamer in the past; he is climbing steadily toward the zenith of his professional career, and his ambitious project for New York's betterment is the fruit of years of study."